Transcript of HEPATITIS A VACCINE SEGMENT of Immunization Update 2006, August 10, 2006.

This podcast is presented by The Centers for Disease Control and Prevention. CDC - Safer. Healthier. People.

DONNA WEAVER:
Two new vaccines were added to the child and adolescent immunization schedule in 2006. One of these was meningococcal vaccine, now recommended for all adolescents. The other was hepatitis A vaccine. Hepatitis A vaccine has actually been on the childhood immunization schedule since 2000. But in 2006 it was elevated to a routine vaccine for ALL children rather than just for selected groups of children. This is an important final step in what has for 10 years been a phased strategy for the prevention of hepatitis A virus infection in the United States. It is important that you understand the rationale for this change in strategy. We asked Dr. Annemarie Wasley, an epidemiologist in the CDC Division of Viral Hepatitis to talk to us about the current epidemiology of hepatitis A and the impact of hepatitis A vaccination in the United States.

DR. ANNEMARIE WASLEY:
Hepatitis A vaccines were first introduced in the United States in 1995. In 1996, the Advisory Committee on Immunization Practices, or ACIP, recommended that people at increased risk of hepatitis A infection should be vaccinated. These recommendations included vaccination of travelers to areas endemic for hepatitis A virus, men who have sex with men, and users of injecting and noninjecting drugs. However, we knew that cases in these groups accounted for only a minority of all cases reported. Most cases of hepatitis A were occurring as part of community wide outbreaks with the majority of infections occurring among children and their adult contacts. We also knew that much of the disease being reported in the U.S. was occurring in the western regions of the country. Cases reported by 17 predominantly western and southwestern states accounted for more than two thirds of all cases reported in the prevaccine era. However, these states represented less than one third of the U.S. population.

Based on this information, in 1999, ACIP recommended that children living in the 11 states which historically had the highest rates of hepatitis A be routinely vaccinated against the disease. Those 11 states are shown here in blue. It was also suggested that vaccination be considered for children in an additional 6 states, shown in yellow. Rates in these 6 states

were not as high as those in the 11 highest incidence states, but were still consistently higher than the national average. Since those recommendations were made, we have seen a dramatic change in the epidemiology of hepatitis A in the United States.

This graph shows the overall rate of hepatitis A in the United States from 1990 through 2004. It shows the decline in rate that began in 1995 and accelerated in 1999, the year routine childhood vaccination was recommended in the high incidence. The rate has declined by 76% relative to the average rate seen in the prevaccine years of 1990 through 1997. The 2004 rate of 1.9 per 100,000 population is the lowest ever recorded. The decline has been greatest in the 17 states where routine vaccination of children is recommended or suggested, shown here by the yellow line. The rate of hepatitis A in the rest of the country is shown in blue. For the first time rates are similar across all regions of the country.

The 1999 hepatitis A ACIP statement targeted children in the highest incidence states. Children historically have had the highest rates of disease. Since that time rates among children have declined more than rates among adults. Now, also for the first time, rates are similar across all age groups. We do not think that vaccination is completely responsible for these declines. Hepatitis A rates in the U.S. have historically shown a cyclic pattern every 10 to 15 years, with periodic increases followed by subsequent decreases. Some of the decline that we are seeing now probably is a result of this pattern. However, hepatitis A rates now are significantly lower than any previously recorded. In addition, the decline has been greater in the age groups and geographic locations recommended for routine vaccination. Together, these factors indicate that the strategy of routine childhood vaccination in areas with increased risk of infection has played a significant role in reducing overall rates of hepatitis A in the U.S.

We are continuing to monitor the occurrence of hepatitis A. Among cases reported in children, the disease is no longer focused in the 17 states targeted by the 1999 recommendations. Many of the states with the highest rates in 2004 do NOT have a recommendation for routine childhood vaccination. Based on the changing pattern of hepatitis A in the United States, the ACIP voted in October 2005 to expand routine vaccination of children nationwide. It is now recommended that ALL children should receive hepatitis A vaccine at 1 year of age. Vaccination should be integrated into the routine childhood vaccination schedule. Children who are not vaccinated by 2 years of age can be

vaccinated at subsequent visits. ACIP encourages states, counties, and communities with existing hepatitis A vaccination programs for children aged 2 through 18 years to maintain these programs. These new recommendations are expected to increase hepatitis A vaccination levels among children throughout the country. We expect that implementation of these recommendations will allow us to sustain and perhaps even further reduce the current low rates of hepatitis A in the United States.

DONNA WEAVER:
We would like to briefly mention a few other points about hepatitis A vaccination of children. Two hepatitis A vaccines are currently available in the United States. Both vaccines are inactivated whole virus vaccines. HAVRIX is GlaxoSmithKline's vaccine. VAQTA is produced by Merck. The vaccine brands are considered equivalent, and interchangeable. ACIP has no brand preference. Both vaccines are available in pediatric and adult formulations. The pediatric formulations are approved for children 12 months of age through 18 years of age. The adult formulations are for persons 19 years and older.

You may be aware that GlaxoSmithKline produces a combination vaccine that contains hepatitis A vaccine, called Twinrix. This product is only approved for persons 18 years of age and older. It should NOT be used for children younger than 18 years. For both single antigen vaccines, Havrix and Vaqta, the schedule is 1 dose, with a second or booster dose 6 to 18 months after the first dose. The minimum interval between the first and booster doses of hepatitis A vaccine is six calendar months. If the interval between the first and booster doses of hepatitis A vaccine is longer than the recommended interval of 6 to 18 months, it is NOT necessary to repeat the first dose. The vaccine should be administered at the same time as all other vaccines the child needs, using a separate syringe and injection site. A revised ACIP statement for hepatitis A vaccine was published in MMWR on May 19, 2006. It contains detailed information about the epidemiology of hepatitis A virus in the United States, and more information about the vaccines. We encourage you to review this useful document and implement routine hepatitis A vaccination of children in your practice. We will have a link to the document on the broadcast updates and resources web page. Routine hepatitis A vaccination of children is preventing a substantial number of HAV infections. Vaccination of children also eliminates a major SOURCE of infection for other children and adults- the group that tends to get more severe disease. Eventually, this strategy will prevent infection in adults who were vaccinated as children, because

immunity appears to persist for many years. After nearly a decade of less than optimum utilization, hepatitis A vaccine is finally making an impact.

To access the most accurate and relevant health information that affects you, your family and your community, please visit www.cdc.gov